

the base of the Carboniferous Limestones, *i. e.*, the system that includes the Psammites of Coudroz and the upper "Old Red." The question of associating the Permian with the Carboniferous provoked the most heated debate. Stur, Blanford, Lapparent, and Newberry spoke in favor of such association; Hughes, Topley, Nikitin and some others, against it. It was finally decided to leave the question as it was. The Triassic was divided into three parts, but without assigning to them any names.

The eruptive rocks were divided according to the scheme of Prof. Lossen, into seven divisions, one of which is "Serpentine." This part of the Congress's work appears not to have received the attention it deserved, as all the petrographers who were consulted by the writer as to the advisability of such a heading of a division, agreed that it was unfortunate. Among these were Profs. Zirkel, Stelzner, and among the other geologists, Profs. Hughes, Hall, and a great many others.

The Congress formerly approved and voted committees to assist two works of the nature of compendiums. The first of these is a Geographical-Geological Dictionary, by D. Juan Vilanova, Piera Professor in the University of Madrid. The committee appointed at the Bologna Congress to assist in this work consisted of MM. Hughes, Mayer-Eymar, Steinmann, Meli, Szabó, and Inostranzeff. M. Vilanova explained that this was merely an attempt of his to make a French-Spanish dictionary of terms, but he hoped that it would be taken up and improved upon by others, and that especially the parallel terms in other languages would be gradually grafted upon it. I should be glad of the assistance of the members of this Society in extending a knowledge of its scope.

The other work which the Congress appointed a committee to foster was Neumayr's *Nomenclator Palæontologicus*. The names of the members of this committee are MM. Gaudry, Zittel, Neumayr, and Etheridge.

On the Species of Iguanina. By E. D. Cope.

(Read before the American Philosophical Society, October 16th, 1885.)

By Iguaninae I mean Iguanidæ* without abdominal ribs† or free dermal margins of the digits‡ which have the nostrils on the line of the canthus rostralis and not below it, and which possess the compressed form and other characteristics indicating an arboreal rather than a terrestrial habit of life. With one exception§ these animals are confined to the forest regions of Tropical America, the greater number of species being found in the West Indies and Mexico. A few species, as the *Conolophus suberis-*

* Exclusive of the Anolidæ, which I have shown to differ in the structure of the lower jaw. Proceedings Academy, Phila., 1864.

† Those with abdominal ribs are the Polychrinæ.

‡ The Basiliscinæ are characterized by the digital margins.

§ The *Brachylophus fasciatus* of the Feejee Islands.

tatus, are entirely terrestrial in their habits. The genera are distinguished as follows :

I. Premaxillary and symphyseal teeth conical.

a Posterior digits with separate combs.

Tail with much of its length free from spines ; a gular fold, *Cyclura* Harl.

aa No separate combs on posterior digits.

Tail with the basal half spinous ; a throat fold..... *Ctenosaura* Wieg.

Tail short, spinous to the end ; a throat fold..... *Cachryx* Cope.

Tail not spinous ; a throat fold..... *Brachylophus* Cuv.

Tail not spinous ; a dewlap which has a crest of spines on its anterior edge..... *Iguana* Laur.

II. Premaxillary and symphyseal teeth trilobate ; no combs on the posterior digits.

A throat fold ; tail not spinous..... *Conolophus* Fitz.

No throat fold ; tail not spinous..... *Amblyrhynchus* Bell.

CYCLURA Harlan.

Journal Academy Natl. Sciences, i, p. 242, 1825. Dum. Bibr., Erp. Gen., iv, 214, 1837. *Metopocerus* Wagl., Natürl. Syst. d. Amphibien, p. 147, 1830. Dum. Bibr., Erp. Gen., iv, p. 210, 1837. ? *Aloponotus* Dum. Bibr., Erpet. Générale, iv, p. 189, 1837.

The species of this genus known to me are the following :

I. Scales of muzzle all small ; combs on third toe only.

Several rows of infralabial scuta ; five scales on canthus rostralis ; crest interrupted at rump only..... *C. carinata* Harl.

II. Large scuta on muzzle ; combs on third toe only ; one row of large infralabials.

Infralabials and other scuta in contact with each other and with labials ; two scales on canthus rostralis ; crest low, much interrupted at nape and rump ; color uniform..... *C. baolopha* Cope.

Infralabial and other scuta separated from each other and from labials by small scales ; four scales on canthus rostralis ; green, with bands.... *C. nubila* Gray.

III. Large scuta on muzzle ; one on middle line protuberant ; combs on second and third toes ; several rows of large infralabials.

Scales very irregular, often minutely granular on scapular regions ; a trace of whorls on tail ; crest interrupted at nape and rump ; black..

C. cornuta Daud.

The reputed species *Cyclura macleayi* Gray, from Cuba, and *C. lophoma* Gosse, from Jamaica, are unknown to me by autopsy.

CYCLURA CARINATA Harlan, Jour. Academy Philadelphia, iv, p. 250, 1825, pl. 15. Cope, Proceeds. American Philosoph. Society, 1870, 558 ; American Naturalist, 1885, 1006.

Turk's island, Bahamas ; Harlan, *Ebell*.

CYCLURA BÆOLOPHA Cope. Proceeds. Academy Philadelphia, 1861, p. 123; American Naturalist, 1885, 1006.

Andros island, Bahamas; Wood.

CYCLURA NUBILA "Shaw." Gray in Griffith's Animal Kingdom, ix, 39 fig. Cope, American Naturalist, 1885, p. 1006. *Lacerta nubila* Shaw, (teste Gray) Zoology. *Iguana cyclura* Cuv. *Cyclura harlani* Cocteau, Hist. S. l'Isle Cuba par de la Sagra Rep., p. 96. *C. carinata* Wiegman, Herpet. Mexicana, not of Harlan.

Cuba.

CYCLURA CORNUTA Dand. *Iguana cornuta* Daudin, Rept., p. 382. Latreille Hist. Nat. Rept., ii, 267, iv, 294. *Metopocerus cornutus* Wagler, Nat. Syst. d. Amphibien, 1830, p. 147. Wiegmann, Herp. Mex., 1834, i, p. 16. Dum. Bibr., Erp. Gen., iv, 211, 1837. Günther, Trans. Zool. Soc., London, 1882, p. 218, Pls. xliii, xlv. Boulenger Cat., Brit. Mus., ii, 1885, p. 188. *Cyclura nigerrima* Cope, American Naturalist, 1885, p. 1006. *C. onchiopsis* Cope, loc. cit.

This species has been until recently but little known, although its name frequently appears in literature. The characters ascribed to it by Duméril and Bibron do not agree with those of any individuals which have come under my notice. These authors distinguish the genus *Metopocerus* from *Cyclura* by the presence of two rows of femoral pores, a character which does not exist in either of the four specimens in the National Museum. The genus *Aloponotus* of the same authors possesses, according to them, the same peculiarity. M. Boulenger, in the last (1885) edition of the British Museum Catalogue, describes this character as though it only occurs "sometimes" in this species, evidently regarding it as inconstant. My confidence in its constancy leads me to describe as new two forms, which perhaps belong to the *C. cornuta*, under the names *C. nigerrima* and *C. onchiopsis*. These differ from each other very much as the genera *Metopocerus* and *Aloponotus* are said by Duméril and Bibron to differ from each other, *i. e.*, in the character of the scutellation. In the *C. nigerrima* the scales are distinct everywhere; in the *C. onchiopsis* they are minutely granular on the sides of the back and on the nape and withers. In a third specimen (in alcohol, No. 9977), the characters are intermediate. Thus, in the type of *C. onchiopsis*, the masseteric protuberances have larger scales set in a general surface of granulations; in the third specimen, the same surface is nowhere granular, but is scutellate. The anterior dorsal region is less granular in this specimen. I therefore think it necessary to unite my supposed species, as has been done by M. Boulenger.

If the presence of the second row of femoral pores is not constant in the *C. cornuta*, then the genus *Metopocerus* cannot be distinguished from *Cyclura*. M. Boulenger relies on the rather greater number of denticles in the lateral teeth in the *C. cornuta*, but my specimens show a tendency

to the tridentate form of the *C. nubila*. The character is, I think, even if constant, insufficient for generic distinction.

I describe the two specimens which represent the extreme of variation of this species, commencing with the type of *C. nigerrima*.

In this specimen the scales of the superior regions are smaller than those of the inferior regions, and are in regular transverse rows, each scale surrounded with granules. There are three rows in two millimeters. The scales of the inferior surfaces are about a millimeter in diameter; like those of the back they have faint traces of keels. The scales of the limbs and tail are keeled. At intervals of about six scales, there are, on the median portions of the sides of the tail, two rows of scales a little larger than the others, which are homologous with those which form the spiny whorls in other species. The crest is rather low on the nape, and is well developed on the dorsal region and anterior part of the tail. On the latter it becomes lower, forming serrate teeth, which are distinguishable to the end of that organ. The crest is interrupted at both withers and rump. Besides the combs on the second and third digits, there is a rudiment of a comb at the base of the first digit. Femoral pores 14-16.

The type specimen of this species was partially skeletonized before it was suspected to be other than a *Metopocerus cornutus*. The plates and scales of the head cannot therefore be described excepting so far as to state that there is a median large scale at the middle of the base of the snout, on an elevation of the nasal bones just behind the transverse line connecting the posterior borders of the bony nares. Between this plate and the canthus rostralis the horizontal surface of the muzzle is covered with rather large antero-posteriorly oval scales, which have a median keel. In the center of these is a larger plate, several times as large as any of them. The scales on the post-frontal region are similar and those of the zygomatic arch posteriorly are larger.

<i>Measurements.</i>	<i>M.</i>
Length of skull to end of quadrate bone .....	.108
Width of skull at front of tympanum.....	.070
Least interorbital width of skull.....	.018
Length of alveolar edge of maxillary bone.....	.050
“ “ body to vent .....	.340
“ “ tail. ....	.500
“ “ humerus.....	.060
“ “ fore arm .....	.057
“ “ femur.....	.075
“ “ tibia.....	.063
“ “ foot.....	.110

The color is everywhere uniform black.

From Navassa island. National Museum, No. 9974.

In a second specimen, the type of *Cyclura onchiopsis*, the scales of the

inferior surfaces are similar in every respect to those of the one described above, while those of the sides, tail, and superior surfaces are quite different. Those of the tail are flat and keeled, and smaller than those of that species, and of equal size. In the scutellation of the back the granular scales are far more numerous, covering almost the whole of the scapular regions and sides of the neck and body. Where the larger scales appear they are round and not arranged in rows, and are separated by granular interspaces as wide as or wider than themselves. On the temporal and lateral gular regions the larger scales are scattered at wide intervals in the granular surface. On the muzzle there are two pairs of scuta behind the nasal plates, which are separated by a granular interval. Behind these, and separated by another interval, is a knob-like median scutum. Between this and the canthus rostralis, but separated from it by a wide granular space, are several scales like the smaller ones in the same position in the *C. nigerrima*. There are three rows of small prominent scales over the eye, forming a rough surface. A series of larger scuta on the zygomatic arch, as far as below the front of the orbit. Two prominent scuta not in contact on the anterior border of the tympanum. Two large and two small rows of infralabial plates. Labials $\frac{8}{9}$. Symphyseal plate large, angulate behind. A longitudinal median gular fold, which terminates in a pendulous transverse gular fold. The scales on these folds are like those of the belly, and not granular like those of the lateral gular region. Femoral pores 18. Tail compressed. Dorsal crest low, interrupted at the withers and groin.

Color, dark brown; belly, breast, fore limbs and sides of head black.

<i>Measurements.</i>	<i>M.</i>
Length of head to end of os quadratum .....	.103
Width of head at front of tympanum .....	.055
Length of body to vent .....	.290
“ “ tail (tip wanting).....	.370
“ “ fore leg. ....	.140
“ “ humerus (measured behind).....	.050
“ “ forearm. ....	.057
“ “ hind leg.....	.200
“ “ femur (measured above).....	.058
“ “ tibia .....	.065
“ “ hind foot.....	.095

There are three specimens of this species in the National Museum which agree in all essential respects. They are from the Island of Navassa. In all of them the temporal and pterygoid muscles are enormously developed, forming swollen enlargements unlike anything seen in any other Iguanid.

According to Duméril and Bibron there are in the *Metopoceros cornutus* three pairs of scuta on the muzzle. According to the description of these authors this animal also differs from the *M. cornutus* in having eight supe-

rior labials ; in the nasals being subround instead of triangular ; in having a large instead a small symphyseal plate. The specimen typical of *C. orchlopsis* has a very low and even imperfect dorsal crest, with a wide interruption between the shoulders, while in the other two it is better developed, and in the type of *C. nigerrima* best of all.

CTENOSAURA Wiegmann.

Isis von Oken, 1828, p. 371. *Enyaliosaurus* Gray. Catal. Lizards, Brit. Mus., 1845, p. 192.

The species of this genus are restricted to the Mexican and Central American regions as *Cyclura* is to the West Indian. The species known to me are six in number, as follows :

I. Caudal whorls complete ; dorsal crest extending only on the anterior dorsal region.

Tail round, whorls separated by one row of scales ; brown with a few black cross-bands on anterior dorsal region..... *C. hemilopha*

II. Caudal whorls complete ; dorsal crest extending to rump.

a Caudal whorls separated by one row of scales.

Three scales on canthus rostralis ; dorsal crest interrupted at rump ; black or dark brown..... *C. multispinis*.

aa Caudal whorls separated by two or three rows of scales.

Head short, obtuse ; three scales on canthus rostralis ; dorsal crest interrupted at rump ; black with yellow cross-bands ; sides of neck yellow..... *C. brevirostris*.

Head wedge shaped ; three or four scales on canthus rostralis ; all, except the posterior one, deeper than long ; dorsal crest interrupted at rump ; black, with yellow and green cross bands and speckles.....

C. teres.

Four canthal scales, the posterior longer than deep ; head elongate, wedge-shaped ; dorsal and caudal crests continuous at rump ; tail compressed ; green with narrow black cross-bands to belly.. *C. completa*.

III. Caudal whorls interrupted ; each represented by a median dorsal spine and two on each side at the base.

Tail depressed, shorter ; dorsal crest widely interrupted at rump ; pale brown with black cross-bands on anterior dorsal region.

C. quinquecarinata.

CTENOSAURA HEMILOPHA Cope, Proceedings Philadelphia Academy, 1863, p. 105. *Ctenosaura acanthura* Bocourt, Miss. Scient. Mexique Rept.

p. 138. *Cyclura acanthura* pars, Dum. Bibr., Erp. Gen. iv., p. 224.

This species is regarded by DeBlainville and Bocourt as the *Lacerta acanthura* of Shaw.* This cannot be correct, as Shaw distinctly states that the dorsal crest of his species extends to the rump. It is probably one of the species of the next section of the genus (II), but which one I am unable to ascertain.

Lower California only ; *Botta* ; *Xantus*.

* Zoology iii.

CTENOSAURA MULTISPINIS sp. nov.

Head elongate, flat above, muzzle narrowed; nostril in the second third of the length to the orbit. Three scales on canthus rostralis, each deeper than long. Seven flat scales across muzzle between anterior angles of orbits. Two rows between supraorbital series. Scales above temporal muscles rather large, weakly keeled. Five series of infralabial plates, not separated by smaller ones. Dorsal crest rather elevated in adult, terminating at the rump. Median caudal crest composed of conical scales, commencing above the posterior margin of the femora. Tail cylindrical at base, covered by whorls of prominent scales with conical points which project strongly, and which are separated by one row of smaller flat scales on the upper half of the tail. On the inferior side of the tail the whorl rows are separated by two intervening rows, which are just like them, having a keel and a mucronate apex. Beyond the middle of the length (end lost) the tail is strongly compressed, but whether this is due to shriveling on drying, I am not sure. Median series of spinous scales uninterrupted. The abdominal scales are larger than the dorsal, which are longer than the lateral scales; all are subquadrate, and none are keeled.

Seven femoral pores.

Color above and below, black.

<i>Measurements.</i>	<i>M.</i>
Length from end of muzzle to vent. ....	.255
“ to line of axilla .....	.125
“ “ line of auricular meatus.....	.062
Width of head at auricular meatus.....	.042
“ “ “ above “ “ .....	.035
Length of anterior limb.....	.093
“ “ “ foot.....	.037
“ “ posterior limb. ....	.150
“ “ “ foot.....	.076

I have before me two stuffed specimens of this species, a large one and probably adult, and a smaller and younger one. The former, which I described above, is No. 201 of Sumichrast's collection, and was procured by him at Dondomingvillo, in the State of Oaxaca, and sent to the Smithsonian Institution. The other specimen was obtained near Batopilas, Chihuahua, by Mr. Edward Wilkinson, and was recorded by me as *Cyclura acanthura* in the catalogue of his collection, Proceedings American Philosophical Society, 1879, p. 261. It agrees with the type specimen in having the distal two-thirds of the tail strongly compressed. The dorsal crest is much less elevated, probably owing to its younger age. The colors are paler, the prevailing tint being light brown with indistinct darker brown cross-bands.

I find a specimen of this species enumerated as var. B. of *Otenosaura acanthura* by Boulenger in the vol. ii of the Catalogue of the Lizards in the British Museum, p. 197, which has just reached me.

CTENOSAURA BREVIROSTRIS, sp. nov.

Head short, with obtuse muzzle with decurved profile. Eyes large; nostril near end of muzzle. in the anterior third of distance between end of muzzle and orbit. The scales of the top of the muzzle and of the frontal region, are subquadrate or subhexagonal, and those of the temporal regions are but little longer than wide. All are more or less convex, the temporals most so. There are six rows of scales between the nasal plates, some of which are wider than long. Three canthal scales, of which the anterior is horizontally divided in one specimen. Four rows of wide loreal scales above four rows of narrow scales above the supralabials. Labials 13. Infralabials graduating in size to gulars, but there are five rows of subcarinate scales distinctly larger. Two rows between the subquadrate supraorbitals. Scales of lateral temporal region convex. Scales of belly larger than those of back and sides, which are equal, except those of the axillar, scapular and lateral cervical regions which are nearly granular. Dorsal crest very low, continuous, excepting for a short distance at the base of the tail. Tail nearly cylindric. The scales of the median superior crest are not more prominent than those of the sides of the tail, but they are not interrupted as are the latter. For the terminal three-fifths of the length, the scales of the tail (except below) are equally spinous. For the basal third they are separated above by two rows of non-spinous scales, and on the lower parts of the sides by three rows.

In both the specimens the femoral pores are exceedingly small and indistinct and are five in number on each thigh. The throat is distinctly cross-folded, but very indistinctly longitudinally folded on the middle line. The sides of the neck have two longitudinal folds.

The general color of the head and body is a blackish-brown, paler below. This is crossed on the back between the sacral and postscapular regions by five yellow marks, which are bands posteriorly, but become spots anteriorly. The sides of the neck are of the same color, contrasting strongly with the black of the throat and nape. This yellow space is partially divided by a black line, which extends posteriorly from the angle of the lower jaw. The limbs are blackish, and on the fore arm are numerous yellow scales, and the tibia is faintly cross-banded. The digits and the tail are annulated with blackish brown and yellow rings of about equal width.

Measurements.

M.

Total length to end of tail (end of latter imperfect)....	.645
Length from muzzle to vent.....	.242
“ “ “ “ line of axilla.....	.097
“ “ “ “ “ “ meatus of ear.....	.045
Width at front of auditory meatus.....	.040
Length (axial) from orbit to end of muzzle.....	.022
“ of fore leg.....	.096
“ “ fore foot.....	.047

	Measurements.	M.
Length of posterior leg.....		.162
“ “ posterior foot.....		.085
“ “ tibia.....		.045

Two specimens of this species are in the National Museum, which were sent from Colima, in Western Mexico, by John Xantus.

CTENOSAURA TERES Harlan, Bocourt, Miss. Sci. Mexique, Reptiles, p. 142

Cyclura teres Harlan, Journ. Acad. Philada., iv, 1825, p. 246, tab. 16

Wiegmann, Herpert. Mex., 1834, p. 42. “*Ctenosaura armata* Gray

Synopsis Griff. Anim. Kingdom, ix, 1831,” Bocourt. *Cyclura pectin-*

ata Weigmann, Herpetol. Mexicana, 1834, p. 42, tab. 2. Dum. Bibron,

Erp. Gen., iv, 1837, p. 221. *Cyclura acanthura* Sumichrast, Univ. et

Revue Suisse; Archiv. des Sciences Phys. et Nat., 1864, p. 49. *Oteno-*

saura pectinata Wiegmann, Gray Catal. Lizards, Brit. Mus., 1845, p. 49.

Bocourt, Miss. Scientifique Mexique, Reptiles, p. 140.

Tehuantepec, *Sumichrast*; Colima, *Xantus*; Tampico, *Dallas*; Vega de Alatorre, Vera Cruz, *Comision Geografica*.

Subspecies BRACHYLOPIA Cope.

Four stuffed specimens from Mazatlan differ from others of equal size and age from other localities in the extreme shortness of the processes which compose the dorsal crest. They are in fact merely elongated compressed scales, longer than high, except on the interscapular region, where they are as high as long. The same character is seen in young specimens of the ordinary variety. There are three scales on the canthus rostralis, of which the posterior is longer than deep, the second deeper than long, and the third, adjacent to the nares, is deeper than long, and divided into a superior and an inferior plate. The color is apparently green in life, punctulated with blackish brown. The punctulations arrange themselves into a row of median dorsal spots, and in three of the specimens into two transverse bands near the middle of the sides of the abdomen. Tail with broad blackish rings. The measurements of the largest specimen are: Total length, 630 mm; to vent, 263 mm; to posterior border of membrum tympani, 59 mm; width of head at front of mem. tympani 40 mm; length of posterior leg and foot, 124 mm; of posterior foot 52 mm.

Mazatlan *Bischoff*; Nos. Natl. Museum, 7180-81-82-83.

CTENOSAURA COMPLETA Bocourt, Miss. Scientif. Mexique, Reptiles, p.

145. *Ctenosaura pectinata* Cope, Proceedings Academy Philada.,

1866, p. 124; Proceedings Amer. Philos. Soc., 1855, p. 388.

Aspinwall, Panama, *Gill*; Guatemala, San Salvador, *Miss. Scientif.*;

Yucatan, *Schott*; Cozumel Id., *Ridgway*.

CTENOSAURA QUINQUECARINATA Gray. Cope, Proceedings Amer. Philo-

sophical Society, 1869, 161. *Cyclura quinquecarinata* Gray, Zoologi-

cal Miscellany, p. 59. *Enyaliosaurus quinquecarinatus* Gray, Catal.

Lizards, Brit. Mus., 1845, p. 192.

Tehuantepec, *Sumichrast*.

CACHRYX Cope.

Proceedings Academy Philada., 1866, p. 124.

This genus is of the type of *Ctenosaura*, differing only in the characters of its tail. It lacks the terminal portion which is in that and other genera free from spinous scales. It is not in my opinion allied to *Urocentrum* or *Hoplocercus* as suggested by Bocourt, genera which belong to the terrestrial division of the family, or *Humivage*.

CACHRYX DEFENSOR Cope. Proceeds. Acad. Phila., 1866, p. 124. Proceeds. Amer. Philos. Soc., 1869, p. 169, pl. 10. Bocourt, Miss. Sci. Mexique, Reptiles, p. 148, pl. xvii. bis. figs. 12, 12a.

Yucatan, *Schott*.

BRACHYLOPHUS Cuvier.

Regne Animal, edit. ii, p. 41. Duméril Bibron, Erp. Gen., iv, p. 225. Gray, Catal. Brit. Mus., 1845, 187. Fitzinger Systema Reptilium, 1843, p. 55. *Chloroscirtes* Günther, Proc. Zool. Soc. London, 1862.

BRACHYLOPHUS FASCIATUS Brong. Cuv. Regne Animal, ii edit., p. 41. Dum. Bibron, Erp. Gen., iv, 1837, p. 226. Gray, Catal. Liz. B. M., 187. *Chloroscirtes fasciatus* Günther, Proceeds. Zool. Soc. London, 1862, pl. xxv.

Feejee Is.

IGUANA Laurenti.

Specimen Synopsis Reptilium, 1768, p. 47. Duméril Bibron., Erp. Gen., iv, 1837, p. 199. Gray, Catal. Brit. Mus., 1845, p. 186. *Hypsilophus* Wagler, Nat. Syst. Amphib., 1830, p. 147. *Amblyrhynchus* "Bell" Wagl., l. c., p. 148 (nec Bellii.).

IGUANA TUBERCOLATA Laurenti.

Subspecies TUBERCOLATA Laurenti, l. c., p. 49. Dum. Bibr., Erp. Gen., iv, p. 203; Gray. Catal. Liz. Brit. Mus., 1845, p. 186.

South America, east of the Andes; Lesser Antilles.

Subspecies RHINOLOPHA Wiegman. *Iguana rhinolopha* Wiegmann, Herpetol. Mexicana, 1834, i, p. 44. Dum. Bibr., Erpet. Gen., iv, p. 207. *Iguana tuberculata* var. Wiegmann, Isis, 1828, p. 364; Cope, Proceeds. Amer. Philosoph. Society, 1869, p. 161.

Costa Rica, *Gabb*; Tehuantepec, *Sumichrast*; Colima, *Xantus*; Cozumel, Yucatan, *Ridgway*.

Tierra Caliente of Mexico.

IGUANA DELICATISSIMA Laurenti. Specimen Syn. Reptilium, p. 48, 1768. Gray, Catal. Brit. Mus., 1845, p. 187. *I. nudicollis* Cuv., Regne Animal, ii, p. 40. Dum. Bibr., Erp. Gen., 1837, iv, p. 208.

Guadalupe, Nevis, *Ober*.

CONOLOPHUS Fitzinger.

Systema Reptilium, 1843, p. 55. Boulenger, Catal. Lizards, Brit. Mus., 1885, ii, p. 186. *Amblyrhynchus* pars Dum. Bibr., iv, p. 197. *Trachycephalus* Gray, Catal. Liz. Brit. Mus., 1845, p. 188.

M. Boulenger (Catalogue Lizards Brit. Museum, 1885) first pointed out the characters which distinguish this genus from *Brachylophus*.

CONOLOPHUS SUBCRISTATUS Gray. *Amblyrhynchus subcristatus* Gray, Zool. Misc., p. 6, 1831. Zoology Beechy's Voyage Rept., p. 93, 1839. *Amblyrhynchus demarlii* Dum. Bibr., Erp. Gen., iv, p. 197, 1837; Bell Zool. Beagle, iii, p. 22, 1843, pl. ii. *Conolophus demarlii* Fitz., Syst. Rept. *Conolophus subcristatus* Steindachner, Festschr. K. K. Zool. Bot. Gess. Wien; Die Schl. u. Eid. d. Galapagos Ins. 22, 1876, tab. iv, v, figs. 6-9; vi, figs. 4-6; vii, 5-8. *Trachyphalus subcristatus* Gray, Cat. Liz. Brit. Mus., 1845, p. 188.

Galapagos Ids.

AMBLYRHYNCHUS Bell.

Zoological Journal, London, 1825, p. 195. Dum. Bibr., Erp. Gen., iv, 204 pars. *Oreocephalus* Gray, Catal. Liz., Brit. Mus., 1845, p. 189.

Steindachner states that the *Amblyrhynchus cristatus* possesses no gular cross-fold. I know of no other ground for separating it generically from the *Conolophus subcristatus*.

AMBLYRHYNCHUS CRISTATUS Bell, loc cit. Tab. xii. Do. Voyage of the Beagle, iii, p. 23. Steindachner Festschrift der K. K. Zoolog. Botan. Gess., Wien, 1876; Die Schlangen u. Eidechsen der Galapagos Ins., p. 16, tab. iii, v, vi, figs. 1-4. *Hypsilophus cristatus* Fitzinger. *Amblyrhynchus ater* Gray. Synops. Rept. Griff. Anim. Kingdom, ix, p. 37. Dum. Bibr., Erp. Gen., iv, p. 196. *Oreocephalus cristatus* Gray. Catal. Brit. Mus., 189.

Galapagos Ids.

Thirteenth Contribution to the Herpetology of Tropical America. By E. D. Cope.

(Read before the American Philosophical Society, Nov. 20, 1885.)

I. NICARAGUA, Bransford.

Dr. J. F. Bransford, U. S. N., has sent from time to time collections from Central America to our scientific institutions, which have thrown much light on the zoölogy of the regions he has visited. In 1874, I had the privilege of publishing a report on a collection obtained by him in Nicaragua*; and later (1875) I published an account† of a collection sent

* Proceedings Academy Philada., 1874, p. 64.

† Journal Academy Philada., 1875, p. 155.